



## Programs

## VZ 200/300

```

1 REM *****
2 REM * MATHS TEST MATCH *
3 REM * DARREN YATES *
4 REM *****
5 DIM B$(1),B$(9,11):N=1
6 SCNLCL:OPEN1,8,0,"HISCORE"
7 FORZZ=1TO9
8 INPUT#1,HS*(ZZ):IFHS*(ZZ)=0THEN10
9 INPUT#1,HS*(ZZ):INPUT#1,DT%(ZZ):NEXTZZ
10 CLOSE1:PRINT"
11 PRINT " HIGHEST SCORES ON 'MATHS TEST MATCH'"
12 PRINT "
13 FORZZ=1TO9:PRINT " LEVEL"ZZ
14 PRINTHS*(ZZ),HS*(ZZ):DT%(ZZ):NEXTZZ
15 PRINT:PRINT"PRESS KEY TO CONTINUE.....":PRINT:GETKEYWH$
16 COLOR1,2:COLOR0,7,0:COLOR4,3,2:GRAPHIC0,1:N=1
17 PRINT:
18 PRINT " MATHS TEST MATCH"
19 PRINT:
20 PRINT:PRINT" YOU HAVE TO ANSWER CORRECTLY THE"
21 PRINT" FOLLOWING SUMS TO COLLECT YOUR RUNS."
22 PRINT" IF YOU ANSWER INCORRECTLY,YOU'RE OUT"
23 PRINT:PRINT " THE LONGER YOU WAIT"
24 PRINT" THE LESS RUNS YOU GET"
25 PRINT" IF YOU FAIL TO ANSWER A SUM,YOU LOSE ONE RUN"
26 PRINT"(C/DN)(C/DN)(C/DN)(C/DN)PLEASE SELECT SKILL LEVEL (1-9)...":INPUTSL
27 SCNLCL:PRINT"
28 PRINT " MATHS TEST MATCH"
29 PRINT:
30 PRINT:FORZ=1TO11:PRINT"BATSMAN"Z:NEXTZ
31 PRINT"(C/DN)(C/DN)(C/RT)(C/RT)(C/RT)(C/RT)(C/RT)(C/RT)(C/RT)(C/RT)(C/RT)"
32 N1%=RND(0)*SL*10:N2%=RND(0)*SL*10
33 AN#=STR$(N1%*N2%)+R*7,0
34 COLOR1,6,4:CHAR1,13,19,"(RVGN)+"STR$(N1%)+%" X "+STR$(N2%)+%+..."+(RVOF)":COL
LORI,2
35 FORL=1TOLEN(AN#)-1
36 GETX$(L):IFX$(L,X)="* THENNEXTL
37 IFL=LENA(AN#)THEN40
38 R=R-.05:CHAR1,17,21,"RUNS LEFT:"-STR$(INT(R)):IFINT(R)=0THEN49
39 GOTD36
40 POKE239,0
41 FORZ=1TOLEN(AN#):CB=CB+X*(Z):X*(Z)="*
42 NEXTZ
43 CHAR1,25,19,CB
44 REM CORRECTNESS
45 IFVAL(CB)<VAL(AN#)THENB(SL,N)=B(SL,N)+INT(R):RN=RN+INT(R):GOTO49
46 QUB=STR$(N1%)+%" X "+STR$(N2%)
47 CHAR1,16,3+N,QUB:N=N+1
48 IFN=11THENS8
49 IFINT(R)=0THENB(SL,N)=B(SL,N)-1:RN=RN-1
50 CHAR1,35,3+N,STR$(B(SL,N))
51 IFVAL(CB)<VAL(AN#)THENCHAR1,24,19,AN#
52 CHAR1,27,17,STR$(N-1)+%" FOR "+STR$(RN)+%" "
53 BALL=BALL+1:IFBALL=6THENDV=DV+1:BALL=0
54 CHAR1,2,16,"OVERS:"+STR$(DV)+%", "+STR$(BALL)
55 IFDV>0THENRR=RN/OV:CHAR1,2,17,"RUN RATE:(STR$(INT(RR))+%" "
56 CB="..":COLOR1,3,2:CHAR1,13,19,"(RVGN) (RVOF)":COLOR1,2
57 FORZZ=1TO500:NEXTZZ:GOTD32
58 CHAR1,11,23,"PRESS A KEY"
59 GETKEYZZ$:SCNLCL:PRINT".....SKILL LEVEL"SL"....."
60 FORXX=1TO11:I*B(SL,XX):HS$(SL)THENHS$(SL)=B(SL,XX)
61 NEXTXX
62 PRINT"HIGHEST SCORE....."(HS$(SL)
63 POKE19,12:INPUT"SCORER'S NAME.....":HS$(SL):PRINT
64 POKE19,12:INPUT"DATE (DD.MM.YY)...":DT$(SL)
65 SCNLCL:HISCORE=OPEN1,8,1,"HISCORE" FORZZ=1TO9:PRINT#1,HS*(ZZ):PRINT#1,HS*(ZZ)

```

### Maths test match

This program was written for the Commodore plus 4 and C16 but with small mods, it will also work on the C128 and C64. It drills you in any of the four basic mathematical operations, at the same time giving you a chance to score points in the form of runs.

The batsman is out when he answers incorrectly and the longer he takes to answer, the smaller the amount of runs are scored. The screen takes the form of a scoreboard, which is self-explanatory.

**D Yates**  
**Frenchs Forest**  
**NSW**

## Commodore

```

3  GOTO1800
3  REM!!
4  LOAD"
5  REM!!
6  BLOAD"
10 REM!!
20 RUN"
30 REM!!
40 BRUN"
50 REM!!
90 ERA"
90 REM
91 *****
92 * DOS "HELLO" PROGRAM *
93 * VZ300/200 *
94 * WRITTEN BY G.TUNNY *
95 * (C)OPYRIGHT 1988 *
96 * NOVEMBER *
97 *****
100 T=PEEK(30884)+256*PEEK(30885)
120 REM
130 T=T+1
135 IFT>32767THENT=T-65536
140 P=PEEK(T)
150 IFP=33ANDPEEK(T+1)=33THEN200
160 IFP=94ANDPEEK(T+1)=94THENRETURN
170 GOTO130
200 T=T+1
210 IFPEEK(T)=34THEN230
220 GOTO200
230 T=T+1
240 FORI=1TOLEN(F$)
250 C$=MID$(F$,I,1)
260 C=ASC(C$)
270 POKET,C
280 T=T+1
290 NEXTI
300 IFL=7THEN160
310 FORI=LTOL
320 POKET,32:T=T+1
330 NEXTI
340 GOTO160
1000 T=28672:C=65:A=1
1005 P=PEEK(T):F(A)=P
1010 POKET,C:POKET+1,93
1020 T=T+32:C=C+1:A=A+1
1030 P=PEEK(T):IFP=97THEN1050
1040 GOTO1005
1050 DIMF$(20):DIMNF$(20)
1060 T=28673:C=1:F=1
1065 F$(C)=" "
1070 FORJ=1TO8:IFPEEK(T+J)=96THENNEXTJ:GOTO1100
1075 P=PEEK(T+J):IFP>95THENP=P-64
1080 F$(C)=F$(C)+CHR$(P)
1090 NEXTJ
1100 C=C+1:T=T+32:FN=FN+1
1110 IFPEEK(T)=96THEN1150
1120 GOTO1065
1150 GOSUB2100
1200 FORI=1TOLEN(B$):A$=INKEY$:A$=INKEY$
1210 PRINT@448,MID$(B$,I,30)
1220 X=USR(X)
1230 IF A$=""THENNEXTI:GOTO1200
1235 IF A$="1"THENLD=1:GOSUB1900
1237 IF A$="2"THENLD=2:GOSUB2000
1240 A=ASC(A$):IFA<65ORA>90THEN1200
1250 A=A-64
1255 IFA>FNTHENSOUND31,1:GOTO1200
1260 F$=F$(A)
1270 IFF(A)=68,CLS:PRINTTAB(6);"CANNOT LOAD DATA FILE!":GOTO1500
1280 GOSUB1000
1283 IFLD=1ANDF(A)=84THEN3
1285 IFLD=1ANDF(A)=66THEN5
1287 IFLD=2THEN60
1290 IFF(A)=84THEN10
1300 IFF(A)=66THEN30
1310 CLS:PRINT" IDENTIFICATION ERROR!!"
1320 STOP
1500 FORI=1TO3: SOUND31,1:24,2:17,4:NEXTI
1510 RUN
1800 CLEAR1500:F$="FILENAME":POKE30862,80:POKE30863,52
1810 CLS:DIR:DIMF$(20)
1820 B$=".....TYPE LETTER TO RUN...1-"
1830 B$=B$+".LOAD.....2-ERASE...WRITTEN BY G.TUNNY (C)OPYRIGHT "
1835 B$=B$+"1988....."
1840 GOTO1000
1900 IFINKEY$<>" "THEN1900
1910 PRINT@480," TYPE LETTER TO LOAD ";
1920 IFINKEY$=""THEN1920
1930 RETURN
2000 IFINKEY$<>" "THEN2000

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```

2010 PRINT#480," TYPE LETTER TO ERASE ";
2020 IF INKEY$="" THEN 2020
2030 RETURN
2100 K=FN:FOR I=1 TO FN
2110 L$=LEFT$(F$(I),1)
2120 L=ASC(L$)
2130 IFL=42 THEN NEXT I:GOTO 2200
2140 Z=Z+1:IF F$(Z)=F$(I):F(Z)=F(I)
2150 X=USR(X)
2160 NEXT I:GOTO 2200
2200 SC=2:Y=1:FN=Z
2210 PRINT#SC, FN$(Y);
2220 IF Y=FN THEN 2250
2230 Y=Y+1:SC=SC+32
2240 GOTO 2210
2250 FOR I=1 TO FN
2260 F$(I)=FN$(I)
2270 NEXT I
2280 FOR I=FN TO 14
2290 PRINT#I*32,"
2300 NEXT I:RETURN

```

## Hello program

This hello program loads the directory onto the screen and conveniently allows the user to load, run or erase programs without typing lengthy filenames.

If there are any filenames that you don't want to come up in the

hello program, rename the filenames to have an asterisk at the front.

e.g. a file - 'picture' becomes (\*Picture).

**G Tunny  
Gorokan  
NSW**

```

00640 S=S+1:IFS=A:S=0:GOTO 670
00650 FOR D=S+1 TO A:IF P1(D)<=P1(S):NEXT D:GOTO 640
00660 GOSUB 710:GOTO 640
00670 S=S+1:IFS=A:RETURN
00680 FOR D=S+1 TO A:IF P1(D)<>P1(S):NEXT D:GOTO 670
00690 IF P1(D)>=P1(S) THEN 670
00700 GOSUB 710:GOTO 670
00710 N1$(0)=N1$(D):N1$(D)=N1$(S):N1$(S)=N1$(0)
00720 P(0)=P(D):P(D)=P(S):P(S)=P(0)
00730 W(0)=W(D):W(D)=W(S):W(S)=W(0)
00740 L(0)=L(D):L(D)=L(S):L(S)=L(0)
00750 P1(0)=P1(D):P1(D)=P1(S):P1(S)=P1(0)
00760 RETURN

```

## Oops, I goof'd

My 8-Ball Percentages program published in the October edition has a minor flaw. The program as submitted will run. However, the sorts as described will not work fully due to my omission of NEXTD in lines 650 and 680. An upgrading of the routine has also

been performed and the lines 640 to 760 should be amended. I humbly apologise for any inconvenience caused by my oversight and promise that all care will be taken in future.

**Gary A Laming  
Mile End  
SA**

## VZ 200/300

```

40 REM VISISORT
50 REM FOR VZ200/300
60 REM BY P.J.SHEPPARD
80 CLS
100 PRINT#200,"-< VISISORT >="
105 ' INITIALISE VARIABLES, ETC
110 CLEAR#0:DIMS(20,2),A$(13),S$(13):X1=400:X2=25:Q$=CHR$(34)
120 PP=36:N1=154:N2=250:N3=186:N5=411:A1=30:A2=36:A3=36
130 SOUND$,9
140 CLS
150 PRINT#PRINT" * VISISORT *

```

```

160 PRINT" -----":PRINT
170 PRINT" (1)..STANDARD BUBBLE SORT
180 PRINT" (2)..BUBBLE SORT WITH SINKER
190 PRINT" (3)..SUPER BUBBLE SORT
200 PRINT" (4)..EXCHANGE SORT
210 PRINT" (5)..DELAYED REPLACEMENT SORT
220 PRINT" (6)..SHELL SORT
230 PRINT" (7)..SHELL - METZNER SORT
240 PRINT" (8)..QUICK - SORT
250 PRINT" (9)..EXIT PROGRAM
260 PRINT#451,"SELECT SORT ROUTINE ...";
265 D$=INKEY$
270 FOR J=0 TO 8:CH$=INKEY$:J=(CH$<"1" OR CH$<"9")):NEXT
280 CH=VAL(CH$):IF CH=9 THEN 230 ELSE PRINT CH: SOUND$,7;0,2
290 CLS
300 GOSUB 430
310 FOR K=0 TO 9: A$(K)=S$(K):PRINT#32*K+32,A$(K);:NEXT
320 NE=0:NC=0:NO=0:NI=186
330 IF NS>9 THEN NI=184
335 ' SORT STATUS
340 PRINT#26,"NO OF ITEMS .. "USING"##";NS+1
350 PRINT#108,"-----";
360 PRINT#140,"COMPARISONS .. 0";
370 PRINT#172,"EXCHANGES .. 0";
380 PRINT#204,"-----";
390 PRINT#236,"TOTAL ACTIONS .. 0";
400 PRINT#268,"-----";
405 ' SORT ROUTINES
410 IF CH=1 GOSUB 1210 ELSE IF CH=2 GOSUB 1400 ELSE IF CH=3 GOSUB 1330
414 IF CH=4 GOSUB 1500 ELSE IF CH=5 GOSUB 1050 ELSE IF CH=6 GOSUB 1840
418 IF CH=7 GOSUB 1970 ELSE IF CH=8 GOSUB 2120
420 GOSUB 860
430 PRINT#300,"*****";
440 PRINT#332,"% SORT COMPLETE %";
450 PRINT#364,"*****";
460 PRINT#423,"RESORT ORIGINAL";
470 PRINT#461,"LIST.....(Y/N)";
475 D$=INKEY$
480 FOR J=0 TO 8:RF$=INKEY$:J=(RF$<"Y" AND RF$<"N")):NEXT:GOTO 480
485 SOUND$,1
490 IF RF$="Y" THEN 750
495 ' SORT DATA
500 FF=0:NS$=""
510 PRINT#HOW MANY ITEMS TO SORT"
520 PRINT#SELECT BETWEEN 1 AND 14 -- ";
525 D$=INKEY$:SS$=""
530 SS$=INKEY$:SOUND$,1
535 IF SS$="" THEN 525 ELSE SOUND$,1
540 IF SS$="1" ANUN$<"1" THEN NS$=NS$+SS$+FF+1:PRINT#SS$;:GOTO 530
550 IF FF=1 AND (SS$<"0" OR SS$<"4") OR FF=0 AND (SS$<"4" OR SS$<"9")):530
560 PRINT#SS$:NS$=NS$+SS$+NS$+VAL(NS$)+1
570 PRINT#PRINT#SUPPLIED BY COMPUTER OR USER ?"
580 PRINT#PRESS "Q$C"Q$ OR "Q$U"Q$"...";
585 D$=INKEY$:RI$=INKEY$
590 IF RI$="U" THEN 600 ELSE IF RI$="C" THEN PRINT#COMPUTER ELSE 585
595 ' COMPUTER DATA
600 PRINT#PRINT#NUMBERS OR LETTERS?"
610 PRINT#PRESS "Q$N"Q$ OR "Q$L"Q$"...";
615 D$=INKEY$
620 FOR J=0 TO 8:R$=INKEY$:J=(R$<"N" AND R$<"L")):NEXT
630 IF R$="N" THEN PRINT#NUMBERS ELSE IF R$="L" THEN PRINT#LETTERS"
635 SOUND$,1
640 FOR K=0 TO 9
650 IF R$="L" THEN S$(K)=CHR$(RND(26)+64) ELSE S$(K)=STR$(RND(62)+10)
660 NEXT K
670 GOTO 750
675 ' USERS DATA
680 CLS
690 PRINT#ONE CHARACTER PER LINE MAXIMUM"
700 PRINT#(LETTERS OR NUMBERS ONLY)"
710 FOR K=0 TO 9
720 PRINT#ITEM "K"= ";
725 D$=INKEY$:FOR J=0 TO 8:S$(K)=INKEY$
730 J=(S$(K)<"0" OR S$(K)<"Z" OR S$(K)<"9" OR S$(K)<"A"))
735 NEXT J
740 PRINT#S$(K):SOUND$,1:NEXT K
750 RF$="N"
760 CLS
770 RETURN
780 PRINT#336,"PRESS (RETURN) TO";
790 PRINT#128,"START THE SORT...";
795 D$=INKEY$
800 K$=INKEY$:IF K$<CHR$(13) THEN 800
810 GOSUB 860
815 ' SORT SPEED
820 PRINT#390,"SPEED SET AT :-"SQR(X1/25);

```